

REMARKS

Claims 1-12 are pending in the above-identified application. These claims have been subjected to a Unity of Invention Requirement as follows:

Group I -- claims 1-3, 5 and 11 directed to compounds of formula I wherein in variable R<sup>4</sup> is bonded to a nitrogen atom which is in turn bonded to both an “oxo” group and another nitrogen atom;

Group II -- claims 1-3, 5 and 11 directed to compounds of formula I wherein variable R<sup>4</sup> is a diazoly or triazoly group bonded at a nitrogen atom;

Group III -- claim 6 directed to preparation of compounds of formula IB;

Group IV -- claims 7-8 directed to preparation of compounds of formulas ICa', formula ICb' and formula ID;

Group V -- claim 9 directed to compounds of formula IV;

Group VI -- claim 10 directed to compounds of formula V;

Group VII -- claim 12 directed to a method of using compounds of Group I; and

Group VIII -- claim 12 directed to a method of using compounds of Group II.

It is asserted in the Office Action that the technical feature linking Groups I-VIII is “...a pyrimidine substituted at [the] 2 position by a nitrogen and at the 5 position by phenyl ring.” It is further noted that the cited article Chan et al. (*Bioorganic and Medicinal Chemistry*, **2002**, 10(9), pp. 3001-3010) discloses this pyrimethamine. It is also asserted in the Office Action that the Species of the compounds falling within the various formulas fail to relate to a single general inventive concept and that, in any case, Chan et al. discloses the pyrimethamine structure.

Election

Applicant hereby elects the subject matter of Group II, wherein R<sup>4</sup> is a diazalone or triazolone group. This election is made with a traversal based on the reasons stated below.

Applicant further elects as a single disclosed species the compound of Example 3 which is disclosed at page 46 of the present specification. This provisional species election is also made with a traversal based on the reasons below.

Regarding the claims which encompass the elected species of Compound No. 3, it is submitted that these claims are claims 1-3, 5 and 11.

Reasons for Traversal of Unity of Invention Requirement and Species Election Requirement

First, it is respectfully submitted that the Office Action incorrectly asserts that the compounds of Formula I, as well as formulas VI and V, fail to include a special technical feature that defines over the prior art. It is incorrect to concluded that Chan et al. discloses or suggests any of the compounds of Formulas I, VI or V. Note that the compounds of these formulas require that 2-position of the pyrimidinyl ring be bonded to a nitrogen atom which is in turn bonded to a second nitrogen atom and an oxo group. This structure for the variable R<sup>4</sup> completely distinguishes all of the compounds from Chan et al. both with respect to the Unity of Invention Issues and the Species Election issues.

Second, it is respectfully submitted that the compounds of Groups I and II have very closely related structures which included the above-noted technical feature (nitrogen bonded to 2-position of pyrimidine, as well as bonded to an oxo group and a second nitrogen) such that the search and examination issues for these categories of compounds likely overlap. Consequently, there is no significant undue burden placed on the Examiner to examine at least the subject matter of both Groups I and II.

Third, it is submitted that the subject matter of Group VII (composition containing compounds of formula I) and Group VIII (method of using compounds of formula I to control harmful fungi) are closely related to the elected subject material of Group II, as well as that of Group I, such that the search and examination issues appear to significantly overlap. Thus, there is no undue burden placed on the Examiner to at least extend the search and examination to include at least that of Group VIII, if not both Groups VIII and VII.

Fourth, as noted in the “administrative instructions under PCT” and Annexes B (in the MPEP, Rev. 5, August 2006, pp. A-157 to A-158), the combination of claims from categories is permitted under the Unity of Invention Rules. Specifically, under Annexes B, Unity of Invention Rule (e)(i), “...in addition to an independent claim for a given product, an independent claim for a process specially adapted for the manufacture of said product and an independent claim for the use of said product [is permitted]...”. Consequently, at least the subject matter of Groups III and VI (i.e. claims 6-8) directed to preparing compounds of formula I, as well as Group VIII (claim 12), should also be examined. It is further requested that the Examiner consider “rejoinder” of claims 6-8 with the other compound and composition “product” claims at an appropriate time during the prosecution of the present application.

Fifth, it is submitted that the compound of formula VI and V (claims 9 and 10) fall completely within the scope of the compounds of Group I, such that if the examination is extended to include the subject matter of Group I, then Groups V and VI must also be included.

In view of the above, it is submitted that at the very least, the subject matter of Groups III, IV, VII, and VIII should be included in the examination of the elected subject matter of Group II. It is further submitted that the related compounds of Group I, together with the subject matter of Groups V-VII, should also be examined in view of the lack of evidence of an undue burden being placed on the Examiner.


If any questions arise in the above matters, please contact Applicant's representative, Andrew D. Meikle (Reg. No. 32,868), in the Washington Metropolitan Area at the phone number listed below.

- ☐ Attached is a Petition for Extension of Time.
- ☐ Attached hereto is the fee transmittal listing the required fees.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to our Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. § 1.16 or under § 1.17; particularly, extension of time fees.

Dated: June 4, 2007

Respectfully submitted,

By   
\_\_\_\_\_  
Andrew D. Meikle  
Registration No.: 32,868  
BIRCH, STEWART, KOLASCH & BIRCH, LLP  
8110 Gatehouse Road  
Suite 100 East  
P.O. Box 747  
Falls Church, Virginia 22040-0747  
(703) 205-8000  
Attorney for Applicant